

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (presently amended) A method of diagnosing or determining the risk of developing gastric cancer in a subject with a *Helicobacter* infection, including:
 - a) determination of IgG2 anti-*H. pylori* antibody level in the subject; and
 - b) comparison of the IgG2 anti-*H. pylori* antibody level with a predetermined control IgG2 anti-*H. pylori* antibody level, wherein a reduction in the level of IgG2 anti-*H. pylori* antibody in the subject compared to the control indicates the presence of gastric cancer or an increased risk of developing gastric cancer.
- 2-22. (presently cancelled)
23. (added) A method of diagnosing or determining the risk of developing gastric cancer in a subject with a *Helicobacter* infection, including:
 - a) determination of γ IFN level in the subject;
 - b) comparison of the γ IFN level with a predetermined control γ IFN level, wherein a reduction in the level of γ IFN in the subject compared to the control indicates the presence of gastric cancer or an increased risk of developing gastric cancer.
24. (added) A method of diagnosing or determining the risk of developing gastric cancer in a subject with a *Helicobacter* infection, including:
 - a) determination of IL-4 level in the subject;
 - b) comparison of the IL-4 level with a predetermined control IL-4 level, wherein an elevation in the level of IL-4 in the subject compared to the control indicates the presence of gastric cancer or an increased risk of developing gastric cancer.
25. (added) A method of diagnosing or determining the risk of developing gastric cancer in a subject with a *Helicobacter* infection, including a combination of a method according to claim 1 and a method according to claim 23.
26. (added) A method of diagnosing or determining the risk of developing gastric cancer in a subject with a *Helicobacter* infection, including a combination of a method according to claim 1 and a method according to claim 24.
27. (added) The method of claim 25, further comprising a method according to claim 24.

28. (added) A method of diagnosing or determining the risk of developing gastric cancer in a subject with a *Helicobacter* infection, including a combination of a method according to claim 23 and a method according to claim 24.
29. (added) A method according to any one of claims 1, 23 or 24 wherein the *Helicobacter* infection is a *Helicobacter pylori* infection.
30. (added) A method according to claim 1 wherein the IgG2 anti-*H. pylori* antibody level is determined by detection of the level in a sample of biological fluid.
31. (added) A method according to claim 23 wherein the γ IFN level is determined by detection of the level in a sample of biological fluid.
32. (added) A method according to claim 24 wherein the IL-4 level is determined by detection of the level in a sample of biological fluid.
33. (added) A method according to claim 1 wherein the IgG2 anti-*H. pylori* antibody level is determined by detection of the level in a biological fluid selected from the group consisting of blood, saliva and gastric fluid.
34. (added) A method according to claim 23 wherein the γ IFN level is determined by detection of the level in a biological fluid selected from the group consisting of blood, saliva and gastric fluid.
35. (added) A method according to claim 24 wherein the IL-4 level is determined by detection of the level in a biological fluid selected from the group consisting of blood, saliva and gastric fluid.
36. (added) A method according to claim 1 wherein the determination of the IgG2 anti-*H. pylori* antibody level either simultaneously provides, or can be performed simultaneously with, a method which provides an indication of *H. pylori* status.
37. (added) A method according to claim 23 wherein the determination of the γ IFN level either simultaneously provides, or can be performed simultaneously with, a method which provides an indication of *H. pylori* status.
38. (added) A method according to claim 24 wherein the determination of the IL-4 level either simultaneously provides, or can be performed simultaneously with, a method which provides an indication of *H. pylori* status.

39. (added) A method according to claim 1 wherein the IgG2 anti-*H. pylori* antibody level is detected by a near-subject assay.
40. (added) A method according to claim 23 wherein the γ IFN level is detected by a near-subject assay.
41. (added) A method according to claim 24 wherein the IL-4 level is detected by a near-subject assay.
42. (added) A method according to claim 1 wherein the IgG2 anti-*H. pylori* antibody level is determined by an antibody assay.
43. (added) A method according to claim 23 wherein the γ IFN level is determined by an antibody assay.
44. (added) A method according to claim 24 wherein the IL-4 level is determined by an antibody assay.
45. (added) A method according to claim 1 wherein the IgG2 anti-*H. pylori* antibody level is determined by ELISA.
46. (added) A method according to claim 23 wherein the γ IFN level is determined by ELISA.
47. (added) A method according to claim 24 wherein the IL-4 level is determined by ELISA.
48. (added) A method of predicting the risk of, or diagnosing, gastric cancer in a subject having a *Helicobacter* infection by
 - a) determining the frequency of IgG2 anti-*H. pylori* antibody- and/or γ IFN- and/or IL-4-producing cells in the subject's blood; and
 - b) comparison of the frequency of IgG2 anti-*H. pylori* antibody- and/or γ IFN- and/or IL-4-producing cells in the subject's blood with a predetermined control level, wherein a reduction in the level of IgG2 anti-*H. pylori* antibody- and/or γ IFN-producing cells and/or an elevation in IL-4-producing cells in the subject's blood indicates the presence of gastric cancer or an increased risk of developing gastric cancer.
49. (added) A method according to claim 48 wherein the blood is purified to provide an enriched white blood cell population.
50. (added) A method according to claim 48 wherein the blood is purified to provide an

enriched white blood cell population and the white blood cell population is further fractionated to obtain specific cell populations.

51. (added) A method according to claim 48 wherein when the frequency of IgG2 anti-*H. pylori* antibody-producing cells is determined, the IgG2 anti-*H. pylori* antibody-producing cells are stimulated with *H. pylori* antigen prior to determination of the frequency of IgG2 anti-*H. pylori* antibody-producing cells.
52. (added) A method according to claim 48 wherein when the frequency of γ IFN-producing cells is determined, the γ IFN-producing cells are stimulated with *H. pylori* antigen prior to determination of the frequency of γ IFN-producing cells.
53. (added) A method according to claim 48 wherein when the frequency of IL-4-producing cells is determined, the IL-4-producing cells are stimulated with *H. pylori* antigen prior to determination of the frequency of IL-4-producing cells.
54. (added) A method of predicting the risk of, or diagnosing, gastric cancer in a subject having a *Helicobacter* infection by
 - a) determining the frequency of IgG2 anti-*H. pylori* antibody and/or γ IFN and/or IL-4-producing cells in the subject's gastric mucosa; and
 - b) comparison of the frequency of IgG2 anti-*H. pylori* antibody and/or γ IFN and/or IL-4-producing cells in the subject's gastric mucosa with a predetermined control level, wherein a reduction in the level of IgG2 anti-*H. pylori* antibody and/or γ IFN-producing cells and/or an elevation in IL-4-producing cells in the subject's gastric mucosa indicates the presence of gastric cancer or an increased risk of developing gastric cancer.
55. (added) A method according to claim 54 wherein the cells are derived from a biopsy sample.
56. (added) A method according to claim 54 wherein the frequency of IgG2 anti-*H. pylori* antibody- and/or γ IFN- and/or IL-4-producing cells is determined by flow cytometry.